

What is Claimed Is:

1. A method in a router configured for establishing an Internet Protocol (IP) connection, the method comprising:

receiving a bisync protocol data frame carrying bisync protocol fields and Base-24 protocol data from an automated banking device via a serial connection;

5 generating a new frame by generating a new header specifying attributes of the Base-24 protocol data and the automated banking device, removing the bisync header, and adding the new header to the Base-24 protocol data; and

outputting the new frame, having the new header and the Base-24 protocol data, to an identified host server via the IP connection.

2. The method of claim 1, further comprising:

second receiving via the IP connection a second frame having host-based Base-24 protocol data and a host-based header specifying attributes of the host-based Base-24 protocol data;

second generating a new bisync protocol data frame; and

5 second outputting the new bisync protocol data frame to the automated banking device via the serial connection.

3. The method of claim 2, wherein the second generating step includes generating new bisync protocol fields based on the host-based header, removing the host-based header, and adding the new bisync protocol fields to the host-based Base-24 protocol data.

4. The method of claim 3, wherein the step of generating new bisync protocol fields includes:

determining a transparency mode for the automated banking device and a data type; and
generating selected bisync data for the new bisync protocol fields based on the determined transparency mode and data type.

5. The method of claim 4, wherein the determining step includes:
first determining whether the transparency mode is one of transparent mode and non-transparent mode; and
second determining whether the data type is one of Ascii text and Extended Binary Coded Decimal Interchange Code (EBCDIC) text.

6. The method of claim 2, further comprising:
third receiving via the IP connection a third frame specifying a connection attempt for the identified host server via a prescribed Transmission Control Protocol (TCP) port;
outputting a poll request to the automated banking device via the serial connection;
determining whether a poll response is received via the serial connection from the automated banking device; and
generating and outputting via the IP connection a device active status frame, based on whether the poll response is received, indicating whether the host can send the second frame.

7. The method of claim 6, further comprising sending a message to the identified host server in response to determining an inactive status for the automated banking device.

8. The method of claim 1, wherein the generating step includes specifying status /sense information for the automated banking device within the new header.

9. The method of claim 8, further comprising sending a message, according to SNMP protocol, to a network management server that specifies the status / sense information for the automated banking device.

10. The method of claim 9, further comprising sending a second message, according to SNMP protocol, to the network management server based on a detected change in at least one of a status of the automated banking device, and a detected change in the IP connection.

11. A router configured for establishing an Internet Protocol (IP) connection, the router comprising:

a serial interface configured for receiving a bisync protocol data frame carrying bisync protocol data fields and Base-24 protocol data from an automated banking device via a serial connection;

5 a bisync to IP resource configured for generating a new frame by generating a new header specifying attributes of the Base-24 protocol data and the automated banking device, removing the bisync header, and adding the new header to the Base-24 protocol data; and

10 an Internet Protocol (IP) interface configured for outputting the new frame, having the new header and the Base-24 protocol data, to an identified host server via the IP connection.

12. The router of claim 11, wherein the IP interface is configured for receiving via the IP connection a second frame having host-based Base-24 protocol data and a host-based header specifying attributes of the host-based Base-24 protocol data, the bisync to IP resource configured for generating a new bisync protocol data frame, the serial interface configured for outputting the new bisync protocol data frame to the automated banking device via the serial connection.

13. The router of claim 12, wherein the bisync to IP resource is configured for generating the new bisync protocol data frame by generating new bisync protocol fields based on the host-based header, removing the host-based header, and adding the new bisync protocol fields to the host-based Base-24 protocol data.

14. The router of claim 13, bisync to IP resource is configured for generating selected bisync data for the new bisync protocol fields based on determining a transparency mode for the automated banking device and a data type.

15. The router of claim 14, wherein the transparency mode is one of transparent mode and non-transparent mode, and the data type is one of Ascii text and Extended Binary Coded Decimal Interchange Code (EBCDIC) text.

16. The router of claim 12, further comprising a local acknowledgment poller state machine configured for:

outputting a poll request, according to bisync protocol, in response to the IP interface receiving a third frame via the IP connection and specifying a connection attempt for the identified host server via a prescribed Transmission Control Protocol (TCP) port;

determining whether a poll response is received via the serial connection from the automated banking device; and

generating and outputting via the IP connection a device active status frame, based on whether the poll response is received, indicating whether the host can send the second frame.

17. The router of claim 16, further comprising an SNMP agent configured for sending a message to a network management server, according to SNMP protocol, in response to the local acknowledgment poller state machine determining an inactive status for the automated banking device.

18. The router of claim 11, wherein the bisync to IP resource is configured for specifying status /sense information for the automated banking device within the new header.

19. The router of claim 18, further comprising an SNMP agent configured for sending a message, according to SNMP protocol, to a network management server that specifies the status / sense information for the automated banking device.

20. The router of claim 19, wherein the SNMP agent is configured for sending a second message, according to SNMP protocol, to the network management server based on a detected

change in at least one of a status of the automated banking device, and a detected change in the IP connection.

21. A computer readable medium having stored thereon sequences of instructions for establishing an Internet Protocol (IP) connection in a router, the sequences of instructions including instructions for performing the steps of:

receiving a bisync protocol data frame carrying bisync protocol fields and Base-24 protocol data from an automated banking device via a serial connection;

generating a new frame by generating a new header specifying attributes of the Base-24 protocol data and the automated banking device, removing the bisync header, and adding the new header to the Base-24 protocol data; and

outputting the new frame, having the new header and the Base-24 protocol data, to an identified host server via the IP connection.

22. The medium of claim 21, further comprising instructions for performing the steps of:

second receiving via the IP connection a second frame having host-based Base-24 protocol data and a host-based header specifying attributes of the host-based Base-24 protocol data;

second generating a new bisync protocol data frame; and

second outputting the new bisync protocol data frame to the automated banking device via the serial connection.

23. The medium of claim 22, wherein the second generating step includes generating new bisync protocol fields based on the host-based header, removing the host-based header, and adding the new bisync protocol fields to the host-based Base-24 protocol data.

24. The medium of claim 23, wherein the step of generating new bisync protocol fields includes:

determining a transparency mode for the automated banking device and a data type; and

generating selected bisync data for the new bisync protocol fields based on the determined transparency mode and data type.

25. The medium of claim 24, wherein the determining step includes:
 - first determining whether the transparency mode is one of transparent mode and non-transparent mode; and
 - second determining whether the data type is one of Ascii text and Extended Binary Coded Decimal Interchange Code (EBCDIC) text.
26. The medium of claim 22, further comprising instructions for performing the steps of:
 - third receiving via the IP connection a third frame specifying a connection attempt for the identified host server via a prescribed Transmission Control Protocol (TCP) port;
 - outputting a poll request to the automated banking device via the serial connection;
 - determining whether a poll response is received via the serial connection from the automated banking device; and
 - generating and outputting via the IP connection a device active status frame, based on whether the poll response is received, indicating whether the host can send the second frame.
27. The medium of claim 26, further comprising instructions for performing the step of sending a message to a network management server, according to SNMP protocol, in response to determining an inactive status for the automated banking device.
28. The medium of claim 21, wherein the generating step includes specifying status /sense information for the automated banking device within the new header.
29. The medium of claim 28, further comprising instructions for performing the step of sending a message, according to SNMP protocol, to a network management server that specifies the status / sense information for the automated banking device.

30. The medium of claim 29, further comprising instructions for performing the step of sending a second message, according to SNMP protocol, to the network management server based on a detected change in at least one of a status of the automated banking device, and a detected change in the IP connection.

31. A router configured for establishing an Internet Protocol (IP) connection, the router comprising:

first means for receiving a bisync protocol data frame carrying bisync protocol fields and Base-24 protocol data from an automated banking device via a serial connection;

means for generating a new frame by generating a new header specifying attributes of the Base-24 protocol data and the automated banking device, removing the bisync header, and adding the new header to the Base-24 protocol data; and

second means for outputting the new frame, having the new header and the Base-24 protocol data, to an identified host server via the IP connection.

32. The router of claim 31, wherein:

the second means is configured for receiving via the IP connection a second frame having host-based Base-24 protocol data and a host-based header specifying attributes of the host-based Base-24 protocol data;

the generating means is configured for generating a new bisync protocol data frame; and

the first means is configured for outputting the new bisync protocol data frame to the automated banking device via the serial connection.

33. The router of claim 32, wherein the generating means is configured for generating new bisync protocol fields based on the host-based header, removing the host-based header, and adding the new bisync protocol fields to the host-based Base-24 protocol data.

34. The router of claim 33, wherein the generating means is configured for:

determining a transparency mode for the automated banking device and a data type; and generating selected bisync data for the new bisync protocol fields based on the determined transparency mode and data type.

35. The router of claim 34, wherein the generating means is further configured for:
first determining whether the transparency mode is one of transparent mode and non-transparent mode; and
second determining whether the data type is one of Ascii text and Extended Binary Coded Decimal Interchange Code (EBCDIC) text.

36. The router of claim 32, wherein the second means is configured for receiving via the IP connection a third frame specifying a connection attempt by for the identified host server via a prescribed Transmission Control Protocol (TCP) port, the router further comprising:

polling means configured for outputting a poll request to the automated banking device via the serial connection, and determining whether a poll response is received via the serial connection from the automated banking device; and
means for generating and outputting via the IP connection a device active status frame, based on whether the poll response is received, indicating whether the host can send the second frame.

37. The router of claim 36, further comprising sending means configured for sending a message to a network management server, according to SNMP protocol, in response to determining an inactive status for the automated banking device.

38. The router of claim 31, wherein the generating means is configured for specifying status /sense information for the automated banking device within the new header.

39. The router of claim 38, further comprising sending means configured for sending a message, according to SNMP protocol, to a network management server that specifies the status /

sense information for the automated banking device.

40. The router of claim 39, wherein the sending means is configured for sending a second message, according to SNMP protocol, to the network management server based on a detected change in at least one of a status of the automated banking device, and a detected change in the IP connection.